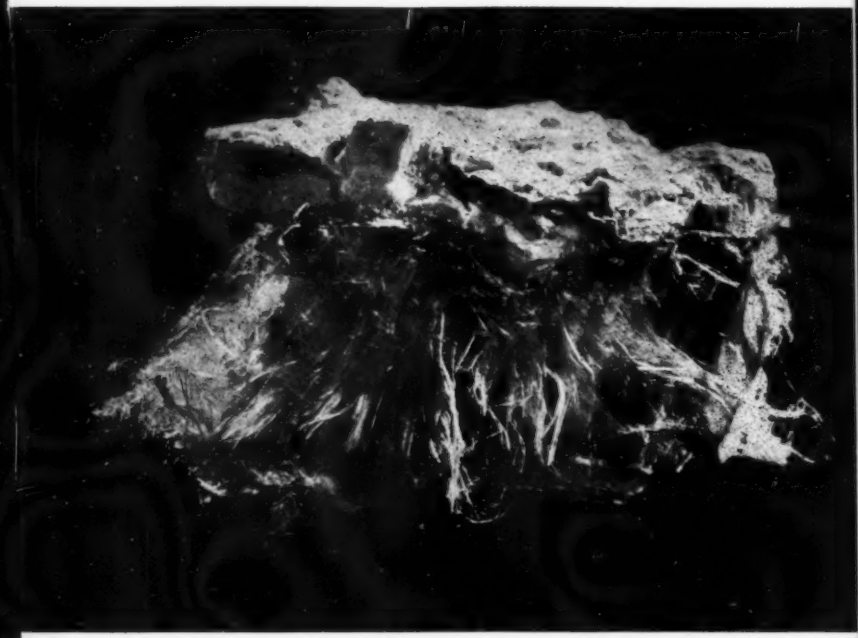
ASBESTOS



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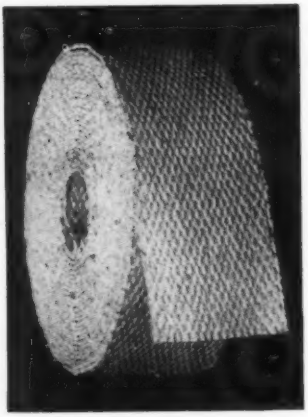

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FIBRE FINENESS - DENSITY

(By Charles Z. Carroll-Porczynski in charge of Textile Research, British Belting & Asbestos Ltd., Cleckheaton, Yorkshire, England.)

DETERMINATION OF DEGREE OF OPENING

The quality of natural fibres like cotton and wool is largely based on the fibre fineness. The finer the diameter of the fibre the better is its quality and higher the value of the material.

This criterion cannot be applied to asbestos for several reasons. The structure of asbestos fibres differs considerably from other natural or man made fibres particularly in one respect, that asbestos even in well fiberized form is still a mass of bundles of fibres and each such bundle could be further subdivided to such a fineness, that only a powerful electron microscope could determine the ultimate diameter of the individual fibres.

Secondly, different characteristics and physical properties can be obtained by varying the extent of subdivision of fibre bundles. Therefore it is not surprising that various mines have developed a range of standard types of fibre textures falling mainly into 3 classes: crudy, semi-crudy and fully opened. With further subdivision in each class based on general requirements of customer.

The selection of the fibre's texture depends upon the use of the final product and on the method of its manufacture. For example, wet processes are employed in the fabrication of asbestos-cement sheets, pipes, millboards and papers. In such processes an easy removal of the water is an important factor. It has been stated that crudy fibre bundles will improve filtration and as the cross-section of the bundles is decreased the filtration rate is slowed down.[1]

It has also been claimed that the very fine fibres of ultimate diameters of 300A improve considerably the strength of the sheets used in the manufacture of laminated materials.[2]

However neither crudy texture nor extremely fine fibres are suitable for the manufacture of asbestos textiles. An ideal textile blend of asbestos fibres should be as free from crudy and stiff bundles as possible for even when

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well "softened" by pan crushing, crudy bundle has great torsional rigidity and resistance to twist which invariably leads to the creation of weak "spots" in the yarn and in general tends to lower the tensile properties of the finished products. On the other hand the extremely fine fibres are difficult to handle in processing due to an excessive loftiness and are less resistant to the mechanical damage of rather harsh willowing and carding operations.

In certain cases however an extra opening process is carried out in order to obtain good "coverage" particularly in the manufacture of rovings for the electrical industry. In view of the large range of fibre textures employed in the manufacture of asbestos products there appears to be a great need for a suitable method of determination of degree of asbestos fibre opening or fineness.

An additional factor calling for such a method is the ease or difficulty of fiberization of asbestos. Fibres obtained from different deposits vary in the ease with which they may be fiberized. Thus two batches of chrysotile asbestos, given the same treatment may furnish products differing considerably in fibre diameter and consequently of different properties. Further, the "slip fibre" due to the mode of occurrence, requires more extensive opening than "cross fibre" in order to free it from impurities, and the extra opening treatment increases the fibre fineness or reduces its diameter.

Incidentally, it is difficult if not impossible to determine the average diameter say of milled asbestos using the standard method of microscope measurements. Even the diameter of a single fibre bundle may vary considerably along its length, to say nothing about the inter-bundles variation.

In attempting to solve this problem the Author's attention was focussed on the new testing apparatus developed by the Wool Industries Research Association, Torridon, Leeds, for the measurement of the average diameter of wool fibres. After a series of tests it was possible to develop a modified version for measuring the degree of opening of asbestos fibres.

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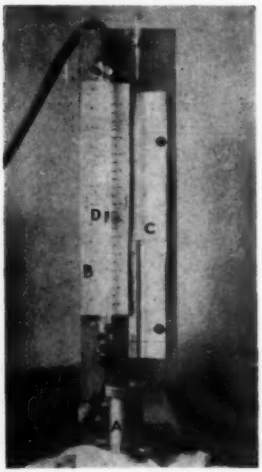
Description of Instrument:

When an air current is passed through a mass of fibres the ratio of air flow (ml/second) to pressure (cm water) is uniquely determined by the total surface area of the fibres if the arrangement of the fibres in the mass is standardized. This principle was utilized in designing the W.I.R.A. Fineness Meter.[3] The essential parts of the apparatus are illustrated in the photo and comprise: 1. Cylindrical chamber A with perforated ends into which the test sample of mass is packed; 2. a flowmeter B to measure the rate of airflow through the fibres; 3. a manometer C to measure the pressure differences, and 4. a pump to provide an air current through the fibres (not shown).



According to the Kozeny equation, the rate of air flow (litres/min) is inversely proportional to the square root of total internal surface for a porous medium. A low reading on the flowmeter will thus indicate a sample with relatively fine fibres.

The usefulness of the Fibre Fineness Meter in its application to asbestos may be ascertained from the experiment described below and carried out on 4 samples of Canadian chrysotile asbestos received from different mines.

Prior to evaluation of the fibre fineness an attempt was made to determine the respective densities of the tested specimens. Results of tests made to obtain density:

Sample	Mean Density	Standard Error	No. of Tests
A.	2.3	0.14	4
B.	2.2	0.05	4
C.	2.1	0.06	4
D.	2.3	0.13	4

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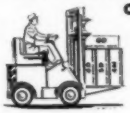

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Samples were weighed in air and in water and the density obtained from the ratio

$$\frac{\text{Weight in air}}{\text{Weight in air} - \text{weight in water}}$$

It may be noted that the difference in the respective densities is small although the consistency of the densities within each sample vary.

Fibre Fineness — Test Results:

Sample	A.	B.	C.	D.
Test No. 1	10.25	2.87	3.75	5.25
Test No. 2	7.00	3.75	4.75	6.80
Test No. 3	9.50	4.00	2.62	5.00
Test No. 4	7.75	3.75	5.75	4.25
Test No. 5	7.50	4.50	5.00	5.12
Litre/min. mean value	**8.40**	**3.77**	**4.37**	**5.12**

In spite of the comparatively large variations the results are reasonably reproducible. It may be noted that there is a very significant difference between sample A and B.

Strangely enough it has been found that the strength of Sample A fibres and the strength of the yarns prepared from this sample was better than those of sample B.

A further attempt was made to compare the strengths of crude fibre B with the strength of the milled fibre B (3K) received from the same mine.

Crude fibre consistently showed an excellent strength while that of milled fibres was rather poor. It is very probable that in the course of the normal processes employed in the extraction of the B fibres from the rock, a considerable proportion of the virgin strength has been lost due to overmilling or due to production of fibres of great fineness at the expense of strength. It appears that a further development and a wider adoption of the tests described above should be of considerable value and help to both the fibre producers and to the fibre consumers, and could lead to some kind of standardization of the fibre textures. Note: All tests should be conducted in standard atmosphere (60% R. H.—70°F) in order to obtain reliable results. The bulk of the mass of fibres packed into a constant volume chamber of

DO YOU have a technical problem concerning asbestos fibre or shorts?

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laboratories at East Broughton, Quebec, Canada, and Lockland, Ohio, and Carey's technical sales staff are at your disposal.

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Asbestos Mines: East Broughton, P.Q.

the fineness meter may be affected by the changes in relative humidity.

Bibliography:

1. Filterability of Asbestos Fibres Used in Wet Processes—M. S.Badollet.
   The Can. Mining and Metallurgical Bulletin Trans. 1949, LII. pp. 260-264.
2. B. P. 562, 161, Superfine Asbestos and Method of Manufacture—The Honorary Advisory Council for Scientific and Industrial Research, Ottawa, Can.
3. The Air-flow Method of Measuring Wool Fibre Fineness—S. L. Anderson, Journal of the Textile Institute, 1954. 45, No. 7, p. 312-316.

"HOW TO MODERNIZE YOUR HOME"

A bookful of ideas and suggestions on home renovation and remodeling has just been released by The Ruberoid Co. It is designed to guide homeowners in practical ways to make their old homes new.

Entitled "How to Modernize Your Home", the book recognizes the fact that although Americans are determined to upgrade their standards of shelter, most of them want to do it by living better right where they are. The publication is timed to contribute importantly to this year's Operation Home Improvement program by stimulating homemakers to modernize their houses with an overall plan in mind.

The book illustrates a large number of methods used for up-dating exteriors and floor plans of older homes. Before and after pictures and comparative floor plans are given, problems outlined, and the steps taken toward solutions are pointed out.

"How to Modernize Your Home" is available to building materials dealers and distributors in any quantity at a moderate cost. Single copies are offered for twenty-five cents, may be obtained from The Ruberoid Co., 500 Fifth Avenue, New York 36, N. Y.

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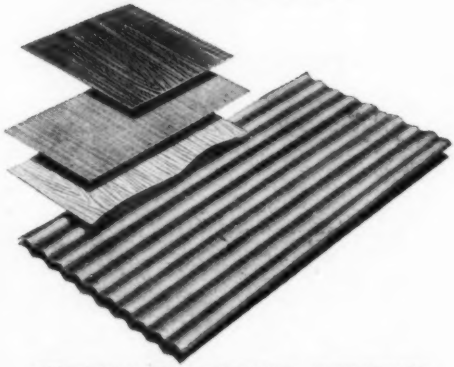

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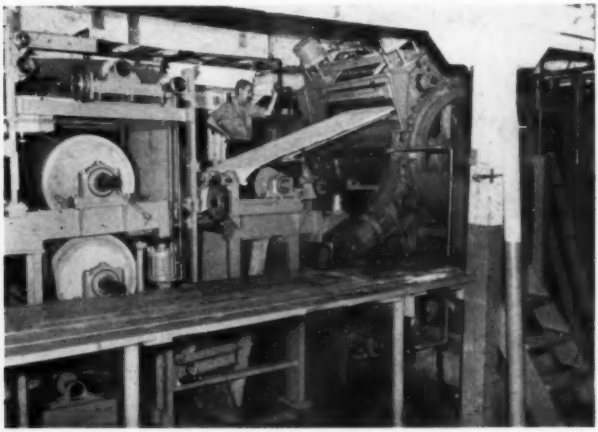
FORMING MACHINE - NEW VISTAS OPEN FOR USE OF WASTE

Engineers from half a dozen diverse industries have been quietly visiting a small, barn-like building in Bound Brook, N. J., in recent months.

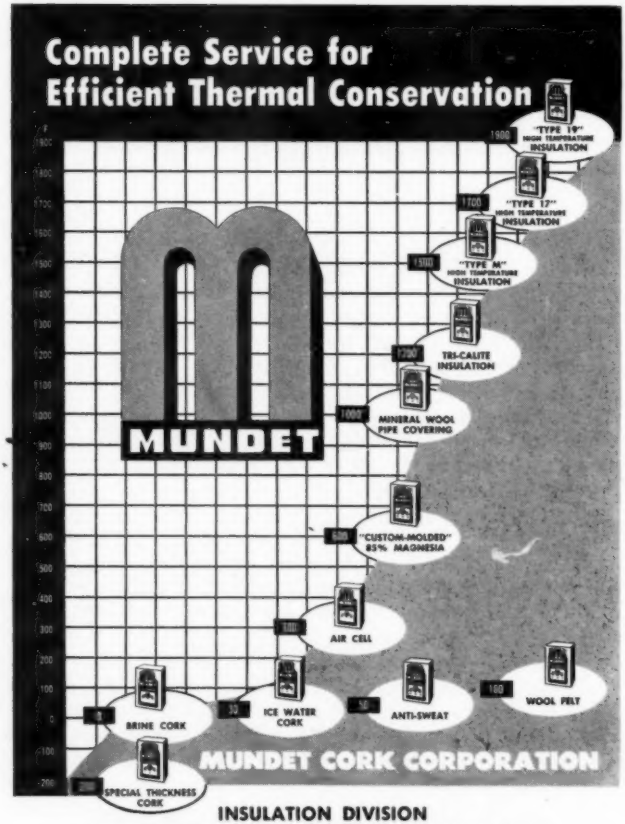
They come at their own request to watch experiments with an invention called a "forming machine"—and to ponder what impact it may have one of these days on the manufacture of wallboard, plastic panels, paper, pipe, automobile bodies and several other products.

The machine feeds on any fibrous material that can be dispersed in water; old newspapers, for example. Or



glass fibers, waste jute (burlap), asbestos, rag fibers, sugar cane waste—even reeds and sawdust.

Any of these materials, mixed with water, is pumped into one end of the forming machine. An air pressure system squeezes the fibers against a moving screen and ejects a large part of the water. And a homogeneous mat or sheet of the stuff emerges at about seventy-five feet a minute—faster or slower depending on the material used and the dryness and thickness desired.



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Plastic resins can be added to the fibers during the continuous felting process, thoroughly impregnating the sheet. The resulting product can be pressed with heat and made smooth, hard and strong as steel.

The machine was invented by Alvan D. Simpson, a mechanical engineer and widely known consultant in the asbestos industry. He holds more than twenty-five patents in the asbestos and paperboard field, and is president of Asbestos Erectors, Inc., Bound Brook, N. J., a prosperous concern that erects corrugated asbestos building panels for oil refineries, aircraft plants and the like.

He has patented his new machine in fifty-five countries. Six patents on various phases of it have been granted in the United States, and fourteen others are pending.

Mr. Simpson has shunned publicity about the machine, saying his research staff is too busy to handle a flood of inquiries. But the word has been getting around. Hundreds of tests have been made, without fanfare, for numerous interested concerns.

The machine at Bound Brook is a pilot model. A larger one which produces a thirty-seven-inch-wide sheet, was built by a well-known pulp machine concern, the Noble & Wood Machine Company of Hoosick Falls, N. Y., for testing on a full-size production basis. This concern now is building the first machines ordered for commercial use.

One forming machine license has been granted to Trimount Plastics, Inc., of Arlington, Mass. This concern plans to combine newsprint waste with a little kraft pulp and phenolic resin to make a board that, when faced with a melamine plastic, will result in a stain and scratch resistant laminate of the type familiarly known as Formica (the trade name of another manufacturer). Francis Shaw & Co. of England has a similar license to make plastic laminates in Canada and Britain.

Alexander N. Bronsten, a specialist in laminates and a consultant to Trimount, is confident that with the forming machine, the company will be able to produce the board at least one-third cheaper than competitive board already in the field. This should considerably

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broaden the market for such laminates and might eventually make them cheap enough for walls, floors and even shingles, he believes. He reports that Trimount already has well over $3,000,000 of orders, although its fifty-four-inch machine won't get into operation until mid-year.

Another license went to the Standard Tube Company of Detroit, which plans to use a combination of newsprint waste, glass fibers and phenolic resin to make plastic pipe. Mr. Simpson says this pipe probably will be priced slightly higher than comparable steel pipe—but will weigh only one-fifth to one-third as much, will be completely non-corrosive, and will have a higher bursting strength and about the same tensile strength. Production is expected to be the equivalent of 100,000 feet of four-inch pipe a day.

In addition, the American Brake Shoe Company is scheduled to receive delivery this month of a forming machine to test its application to the manufacture of friction materials. A major chemical company has been experimenting with one for making glass fiber-reinforced plastic building panels and partitions. And a wallboard company has obtained an option on one for making board out of sawmill bark.

The Krupp interests of Germany are negotiating for a license to use the machine for an entirely different application—removing waste fibers and solids from plant effluent to reduce pollution of rivers such as the Rhine.

Mr. Simpson acknowledges that engineers of two large automobile companies have been to Bound Brook, too.

Mr. Simpson believes many more uses will be found. But he has rejected his friends' urgings that he heavily capitalize his Forming Machine Company of America and embark on a large-scale promotion. "Too early yet," he says, "We want to learn how to crawl properly before we try to run."

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A.S.H.A.E. GUIDE - 1956

The 1956 edition of the HEATING, VENTILATING, AIR CONDITIONING GUIDE, published annually by The American Society of Heating and Air-Conditioning Engineers, has just been issued. This guide is an instrument of service prepared for the profession containing a Technical Data Section of reference material on the design and specification of heating, ventilating, and air conditioning systems, a Manufacturers' Catalog Data Section containing essential and reliable information concerning modern equipment; Complete Indexes to technical and catalog data sections.

Copies of the volume 34, priced at $12.00 per copy are available through ASHAE headquarters, 62 Worth Street, New York 13, N. Y.

PACKOMATIC FULLY-AUTOMATIC BALE SEALER - BROCHURE

A new four-page brochure describing the Packomatic Fully-Automatic Bale Sealer has been produced by the J. L. Ferguson Company of Joliet, Illinois, manufacturer of packaging machinery.

The brochure outlines pictorially, step-by-step, the operation of the bale sealer—designed to automatically fold, glue, seal, and compress kraft paper bales up to 100 lbs. weight. In addition it provides technical data on range, speed, dimensions, construction features and adaptability plus a blueprint elevation.

The new brochure is available upon request by writing to the J. L. Ferguson Company, Rt. 52 @ Republic Avenue, Joilet, Illinois.

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J-M REORGANIZES RESEARCH CENTER

The J-M Research Center has been reorganized to conform directly with J-M division lines and to accelerate the development and commercializaton of new and improved products and processes. Preparation for this move on the part of the research organization has been underway for several years.

Under the new policy, each of seven J-M operating divisions will have a specific research department assigned to its work. Heading up each department will be a manager whose prime efforts are to be devoted to research and development activities of the division to which his department is assigned. The new policy will be to put increased emphasis on individual research programs tailored to meet the needs of each division.

To assist E. R. Williams, Director of the Center, in piloting the new organization, the position of Associate Director of the Research Center has been created. G. B. Brown has been given this responsibility.

Research and development activities, not including administrative departments, are reorganized into the following departments:

Building Products; Industrial Insulations; Packings and Friction Materials; Pipe; Asbestos Fibre; Celite; Dutch Brand and Central Plastics; Central Chemical & Physical Research.

Separate departments will not be established for the Canadian Products and International Divisions.

Each research department for an operating division will be under the direction of a manager assigned the specific responsibility for research and development of the product line of the division. In addition, the research department of one division may provide services on a particular product line for another division or conduct exploratory work. Such work will be done on a basis agreed to by the Division Managers concerned in consultation with the Associate Director. (Research work for the Canadian Products and International Divisions will be arranged for by the Associate Director of the Center.)

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The research manager for a division will afford the principal channel of research and development communication between all departments of the research center and the division. He will be available for consultation by the division general manager and his staff. It is expected he will be included in division staff, important sales and production meetings which will give him the opportunity to be informed generally on matters of the division in the same manner as other principal divisional staff managers.

A. S. T. M. - ANNUAL MEETING

Forty leading manufacturers and distributors from the United States and Canada, including representatives of European companies, will take part in the 12th Exhibit of Testing and Scientific Apparatus and Laboratory Supplies to be held in connection with the 59th Annual Meeting of the American Society for Testing Materials, Chalfonte-Haddon Hall, Atlantic City, N. J., June 17-22, 1956. On display will be hundreds of items ranging from small hand-manipulated instruments through electronically controlled devices and high temperature ovens to universal testing machines. Exhibitors are making every effort to develop a "show" that will be truly outstanding, educational, and an opportunity for the research scientists, testing and materials engineers, and educators attending the meeting to see the latest in testing and research apparatus. Booths will be attended by exhibitors' representatives thoroughly qualified and able to discuss the problems for which their apparatus is designed.

Asbestos-based flexible strip slates of the square-butt type are now being produced by the Ruberoid Company (1-19, New Oxford Street, London, W.C. 1, England). They are suitable for use on private houses and other buildings and differ from the normal Ruberoid slate by having a base of bitumen impregnated asbestos fibres instead of a felt fibre base saturated with bitumen.

The slates are supplied in strips of two and are claimed to be completely weather resisting.

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MARKET CONDITIONS

GENERAL BUSINESS.

While automobile production and sales are still lagging, most other industries continued to show excellent sales and profits during the first quarter of this year. Producers of both consumer and capital goods are, in general, enjoying extremely good business. Within the past month many concerns have announced long range plans for expansion which could well insure good business for capital goods producers for several years to come. Defense and other governmental spending are playing a relatively minor part in the boom which up to now has been based almost solely on tremendously increasing consumer demand. At the moment there appears to be no weakening in the general business picture.

ASBESTOS — RAW MATERIAL.

Production and shipments of asbestos fibre from Canada were approximately at the same volume as during the first quarter of 1955. Very heavy pre-shipments during November and December reduced the normal January demand.

With the pick-up in a number of consumer lines as Replacement Brake Lining, Asbestos Paper and Floor Tile, together with the opening of navigation, accelerated movement and increased volume of fibre shipments, is the forecast for May.

Practically all grades of fibre are in excellent supply with the possible exception of No. 1, and to a small degree, No. 2 Crudes.

ASBESTOS — MANUFACTURED GOODS.

Asbestos Textiles. The market appears to be slightly improved over that which was experienced thirty days ago. There has been some resumption of government buying which has generally helped the asbestos cloth situation. The outlook is fair but a high level of general business and steel would result in continued satisfactory demand.

Asbestos Paper. Orders for this material have increased slightly. Due to a number of new uses and develop-

CANADIAN ASBESTOS

THE NICOLET ASBESTOS MINE
Norbestos (via Warwick)
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ASBESTOS FIBRE DIVISION

70 Pine Street

New York 5, New York

ments for these products, the outlook for the consumption of Asbestos Paper for the balance of the year is better than at any time during the past five years. *Millboard* orders are very slow and the competition for the available business is keen. *Saturated Paper* market seems to be increasing slightly as several large orders have been received.

Insulation. High Pressure. There appears to be some improvement but it has not reached the proportions which have been anticipated. The market is not as good as it was this time last year. It is felt that the last half of the year will show a decided improvement over the present period and it is hoped that it will exceed the volume of business done in the last half of 1955.

Insulation. Low Pressure. Business has picked up for this material and volume is greater than at any time so far this year.

Asbestos Cement Products. Sales for asbestos siding maintain the same level as last year for the same period. A decline is expected following the middle of May—due to heavy buying against price advance.

Seasonal increase has not yet been fully experienced for pipes. Weather conditions in some areas have retarded the installation. The outlook is good with anticipation of demand being at least equal to production.

The above comments have been made by various informed executives in the Industry. All comments are welcome.

ESTIMATOR SALESMAN WANTED

Experienced Estimator Salesman wanted to read specifications, take off quantities, price up labor and material, and sell contracts for plumbing, heating, Air Conditioning, and process systems. Get in touch with Chris Botsolas, Industrial Insulators Corp., 744 State St., Perth Amboy, N. J.—Hillcrest 2-5656.

FLINTKOTE MINES LIMITED

View of site at Thetford Mines, Quebec

Modern, self-propelled drilling equipment

Electric shovel and huge diesel truck at the Flintkote Thetford Mine

Flintkote...a major asbestos producer ...now offers asbestos fibres for sale. Inquiries should be addressed to

Flintkote Mines Limited
(subsidiary of The Flintkote Company)
Thetford Mines, Quebec, Canada

BUILDING

Contract awards for future construction in the 37 eastern states soared to $2,382,000,000 in March, according to F. W. Dodge Corporation, construction news and marketing specialists. Several new records were set by the March figures:

—The total was the highest for any March in history, 12 percent above March of last year.

—It was the second highest total for any month in Dodge's 65 years, exceeded only by May, 1951, when atomic energy contracts of nearly a billion dollars were let. If atomic energy contracts are excluded, March, 1956 was by far the highest month.

—Residential awards in March were the highest for any month in history, and the total of $1,105,000,000 was 12 percent ahead of March, 1955.

—The first quarter of 1956 set new all-time records for total contract awards and for each major category—residential, non-residential and heavy engineering.

—Heavy engineering awards were the highest for any March in history; the total of $395,000,000 was two percent ahead of March, 1955.

Other details:

March non-residential, up 16 percent over March 1955 at $881,000,000.

First quarter 1956 totals compared with the like period 1955 were: Total construction, up 17 percent at $6,100,000,000; non-residential, up 17 percent at $2,172,000,000; residential, up 8 percent at $2,599,000,000; heavy engineering, up 42 percent at $1,328,000,000.

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starting from the usual
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ANEWLY-DEVELOPED LINE OF MACHINERY

(Patents Marchioli & Gremigni)

for manufacturing

FITTINGS

OF EVERY SHAPE AND DIMENSION

—TOUGH
—RESILIENT
—COMPACT
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PLANTS ALREADY IN OPERATION IN OUTSTANDING FACTORIES

Inquiries for Details, Quotations and References are welcome.

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22 Morgagni, Milan, Italy

Cable: MINITA—MILANO **Phone: 26 67 27**

BUILDERS BEWARE:

The greatest sin of land developers is bucking nature. They use bulldozers until each parcel of land looks exactly like all others. The results are erosion, dying trees or no trees at all. It costs more to back nature than it does to adapt your house to the site, according to an address by Max Wehrly, executive director of the Urban Land Institute, quoted in the March HOUSE & HOME, national magazine of the home building industry.

In an artiele advising builders on the need for consulting engineers and land development experts before buying land or recklessly changing its contours, the magazine also adds this warning from FHA's assistant chief land planner, Charles Eveland: "Drainage can be very expensive, so before you buy land study adjacent sites and decide where surface water will come from. Employ an engineer to go over your site. Because there is no flooding now, it does not mean there will be none later. When you fill up land with houses, driveways, paved patios and streets you completely change its drainage characteristics."

ASBESTOS-CEMENT MACHINERY

Wet machines with Auxiliaries for the production of 24" to 48" wide, flat or corrugated sheets in commercial lengths.

Fiberizing Equipment, Rotary Cutters, Wet and Dry Trimmers, Finishing and Texturing Machines.

Your inquiries are most welcome

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New

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Huyck now offers felts specifically engineered for the asbestos cement industry.

The manufacturing process — incorporating techniques and equipment independently developed by Huyck's engineering staff — consists of needling a fiber bat into a loosely woven base fabric.

A wide range of constructions, including various fiber blends, nylon, cotton and wool is available.

Huyck's well-informed Sales Engineers and Field Service Engineers will be glad to discuss your specific requirements with you. Your inquiry will receive prompt attention.

F. C. HUYCK & SONS • Rensselaer, New York
Established 1870

NFPA 1956 ANNUAL MEETING

Sixty years of fighting fires with engineering and public education will be marked when the National Fire Protection Association holds its sixtieth consecutive Annual Meeting in Boston the week of June 4-8, 1956.

The international fire safety group, founded in 1896, is the source of most of the nation's fire protection standards, suggested ordinances and codes. Also the Association sponsors the principal North American fire safety campaigns including the public service advertising drive featuring "Sparky" the fire preventing Dalmatian.

Over 1500 persons from all over North America and abroad are expected to attend the week-long NFPA conference in June. And anyone interested in fire safety may attend.

The Association has been headquartered in Boston, Massachusetts throughout its entire 60 years.

THE COLONIAL SUGAR REFINING CO. LTD.

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Sole Distributors for

AUSTRALIAN BLUE ASBESTOS LIMITED, PRODUCERS OF AUSTRALIAN RAW BLUE ASBESTOS. MINES AT WITTENOOM, W.A.

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Austria, Czechoslovakia, Germany, Hungary, Japan, Poland, Yugoslavia. — **Carters (Merchants) Ltd., Winchester House, Old Broad St., LONDON.**

Australian Blue is an ideal fibre for asbestos cement and for purposes requiring good heat insulation and acid resistance. It possesses excellent spinning properties. Samples are available upon request.

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OF ALL TYPES

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(Private Branch Exchange)	London

PRODUCTION STATISTICS

Canada

(Department of Mines, Province of Quebec)

Tons 2,000 lbs.

Production for February 1956 (Quebec)	64,053 tons
Other Provinces	3,800
	67,853

Total production for February 1956 was 68,520 tons

Africa (Rhodesia)

(Published by Rhodesia Chamber of Mines)

Tons 2,000 lbs.

Production for December 1955	10,678.82 tons
Valued at	£ 734,953
Production for December 1954	6,711.95 tons
Valued at	£ 485,444
Production for Year 1955	105,261.29 tons
Valued at	£7,051,831

Imports of Asbestos by United Kingdom

Raw Material

		1954	1955
		Tons (2240 lbs.)	
From:	Unión of South Africa	18,005	20,864
	Basutoland, Bechuanaland and Swaziland	10,364	6,042
	Rhodesia and Nyasaland	39,094	45,100
	Canada	53,531	68,742
	Other Commonwealth Countries and the Irish Republic	2,869	2,766
	Foreign Countries	498	1,819
		124,361	145,333

United Kingdom imports of asbestos, crude, fibre and waste (including asbestic) were at a record level, both in quantity and value, in 1955, according to the latest British Board of Trade returns.

These figures were supplied by Reuters Economic Services, Johannesburg.

J-M Asbestos Yarn

THERE IS sure to be a Johns-Manville Asbestos Yarn to fit your requirements. Made of high quality Asbestos Roving, they are available plain . . . reinforced with cotton or other yarns . . . wire-inserted (copper, zinc, stainless steel, Monel, etc.) . . . or treated . . . in a wide range of grades, cuts and plies.

Their main use, of course, is in being woven into high quality cloths and tapes. They are also braided into tubing of the better class. Other uses include cores and wrappings for electrical resistance wires; packaging for flexible tubing; wire wrapping in galvanizing plants and fireproofing electrical cables. For more information, write for brochure TX-2A. Johns-Manville, Box 60, New York 16, N. Y. In Canada, Port Credit, Ont.

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QUALITY CONTROLLED FROM MINE TO YOU

JOHNS-MANVILLE CORPORATION
CHANGES IN PERSONNEL

C. W. Hite has been appointed Vice-President for Industrial Relations. This title was formerly Vice-President for Relationships. He succeeds *L. C. Hart*, who will retire on June 1.

The new Vice-President has been Director of Plant Industrial Relations at Headquarters since 1948. He joined the Company in 1937 as Industrial Relations Manager at Alexandria Plant. In 1952 he was named a Vice-President of the Johns-Manville Products Corporation.

The title, Director of Plant Industrial Relations, is changed to Director of Employee Relations. *Frank V. Galbraith* succeeds C. W. Hite in this post.

R.M. King is appointed a Labor Relations Manager at GHQ, effective August 1st. He joined the Company as Natchez Plant's Training Manager in 1947.

James G. Moore, Jr., Personnel Contract Advisor, will continue his new duties under the new title of Labor Relations Manager.

The appointment of *A. Lawrence Cunningham* as Advertising Manager for Industrial Building Products has been announced. He joined the Company in 1920 as a Salesman in the Boston District. In 1947 he was made Assistant Advertising Manager for Building Products.

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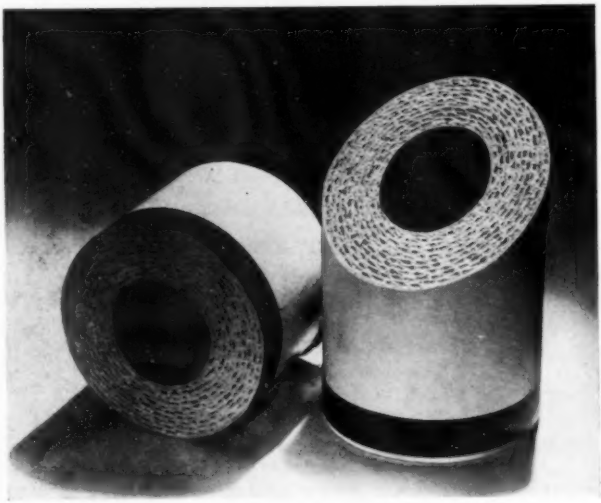

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For Temperatures up to 650° F.
Write for attractive prices

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Atasco Felt	Wool Felt
Atasco Cell	Frost-Proof
Asbestos Aircell	Asbestos Aircell Sheets
Asbestos Paper	

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***Branch Plant*—Red Hook, N. Y.**

AUTOMOBILE SALES

	March 1956
Passenger Cars	583,169
Motor Trucks	106,381
Motor Coaches	434
	689,984

In March 1955, a total of 894,597 motor vehicles were sold. In the three months of 1956 the total was 2,043,823.

These figures were supplied by the Automobile Manufacturers Association, New Center Building, Detroit, Michigan.

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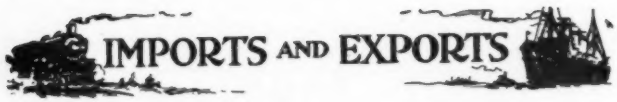
Board of Trade Building, Chicago 4, Illinois

In Canada

CAPE ASBESTOS (Canada) Ltd.
200 Bloor Street East, Toronto, Ontario



Imports into U.S.A.

(Figures by Bureau of Census)

Unmanufactured Asbestos:

		January 1956 Tons (2240 lbs.)
From:	Canada	45,178
	Union of S. Africa	1,635
	Rhodesia (Ny)	697
	Yugoslavia	541
	Other Countries	27
		48,078
	Valued at	$4,742,09¢

By Grades:

Crude No. 2, Chrysotile, Canada	24
Crude, Other, Chrysotile, Yugoslavia	541
Crude, Other, Chrysotile, Rhodesia (Ny)	697
Crude, Other, Chrysotile, Other Countries	1
Crude, Blue, Union of S. Africa	776
Crude, Amosite, Union of S. Africa	859
Crude, Amosite, Other Countries	2
Textile Fibres, Chrysotile, Canada	1,693
Textile Fibres, Chrysotile, Other Cun'ries	11
Shingle Fibres, Chrysotile, Canada	6,689
Paper Fibres, Chrysotile, Canada	2,919
Other Fibres, Chrysotile, Canada	33,853
Other Fibres, Chrysotile, Other Countries	13
	48,078

Manufactured Asbestos Goods:

	January 1956 Quantity (Lbs.)	Value
Asbestos Yarn, Canada	38,107	$25,577
United Kingdom	41,406	35,603
Other Countries	3,988	4,675
Asbestos Packing & Lining	2,147	2,870
Asbestos Shingles (Not Impreg.)		
Canada	1,054,249	90,087
Italy	1,183,574	55,243
Asbestos Manufactures — Others	.....	4,170
	2,323,471	$218,225

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We process to customers' requirements all types of Asbestos
ENQUIRIES WELCOMED FOR
CAPE BLUE TRANSVAAL BLUE • AMOSITE • CHRYSOTILE ETC.

Exports from Canada

(Published by Dominion Bureau of Statistics)

Unmanufactured Asbestos:	January 1956 Tons (2000 lbs.)	Value
Crude		
United States	23	$ 8,465
United Kingdom	....	.....
South America	....	.....
Central America & Mexico	....	.....
European Countries	....	.....
Other Countries	....	.....
	23	$ 8,465
Milled		
United States	12,971	$2,406,087
United Kingdom	1,964	581,581
South Africa	1,077	175,567
Central America & Mexico	56	8,736
European Countries	5,065	929,089
Other Countries	4,215	705,049
	25,348	$4,806,209
Shorts		
United States	34,450	$1,709,528
United Kingdom	1,686	63,896
South America	257	19,937
Central America & Mexico	289	20,743
European Countries	2,604	174,274
Other Countries	1,004	75,198
	40,290	$2,063,576
Grand Total—Unmanufactured Asbestos	65,661	$6,878,250
Manufactured Asbestos Goods:		
Brake Lining		$ 33,945
Packing		14,493
Other Materials		88,735
		$137,173

Exports From U. S. A.

(Figures by Bureau of Census)

Manufactured Asbestos Goods:

	January 1956 Quantity	Value
Asbestos Brake Lining		$ 430,903
Asbestos Construction Materials	Lbs. 2,836,557	265,755
Asbestos Manufactures — Other		427,333
		$1,123,991

BELL ASBESTOS MINES LTD.

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CANADA

Producers of

Raw Asbestos Crudes

& Fibres

Sales Representatives

for

Cassiar Asbestos Corporation Limited

NEWS OF THE INDUSTRY

HAPPY BIRTHDAY

John J. Dempsey, President, Armor Products Inc., New York City, May 18.

William B. Millar, Consulting Mining Engineer, Silver Bay, N. Y., May 18.

Clifford F. Rassweiler, Vice Chairman of the Board, Johns-Manville Corp., New York City, May 18.

William J. VanAkin, Vice President of Manufacture, The Ruberoid Co., New York City, May 23.

W. S. Lang, Vice President, Magnesia-Asbestos Insulating Co., Inc., New York City, May 25.

Stephen Harrison, Owner, Asbestos Service Company, Youngstown, Ohio, May 26.

George V. Hamilton, Owner, George V. Hamilton Company Pittsburgh, Pa., May 26.

J. H. Mooney, Vice President, Johnson's Company, Thetford Mines, Canada, May 27.

Giles Newton, Managing Director, Cape Asbestos Co., Ltd., London, England, May 27.

Stuart H. Ralph, Vice President & Director, The Flintkote Company, New York City, May 27.

Harry C. Templeton, President, Drycor Felt Company Staffordville, Conn., May 29.

George A. Gelish, President, Port Asbestos Insulation Company, Brooklyn, N. Y., June 1.

Charles H. Jackson, President, Atlas Asbestos Co., Ltd., Montreal, Canada, June 2.

Phil Ziegenfuss, President & Treasurer, Insulating Materials Company, St. Louis, Mo., June 2.

Norman C. Naylor, Director, Union Asbestos & Rubber Company, Chicago, Ill., June 3.

Ford Brown, President, MacArthur Company, St. Paul, Minn., June 5.

Edward J. Ewald, Vice President, Standard Asbestos Mfg. Company, Chicago, Ill., June 6.

E. M. Railton, Vice President (in charge of Western Division), The Ruberoid Co., Chicago, Ill., June 8.

W. Robert Beldam, Director, Beldam Asbestos Company, Ltd., Hounslow, England, June 8.

H. E. Howell, Vice President, Ehret Magnesia Mfg. Company, Valley Forge, Pa., June 8.

Manley Alsaker, Branch Manager, Kelley Asbestos Products Company, Omaha, Nebraska, June 9.

Herbert Morton Ball, Secretary & General Attorney, Johns-Manville Corporation, New York City, N. Y., June 9.

JOHN HOLT & COMPANY INC

17 State St. New York 4, N. Y.

Importers of South African Asbestos

Representing

JOHN HOLT & COMPANY (PTY) LTD.

JOHANNESBURG CAPETOWN

ASBESTOS FIBRES

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INSULATION

Reaching and selling the nation's top aggressive contractors each month

SELL YOUR PRODUCT IN RSI

BPA audited circulation of 11,500 representing the highest buying power in the trade.

RSI - 45 West 45th St., New York 36

L. L. Collonge, President, The Pacific Asbestos-Cement Products Corp., San Bernardino, Calif., June 9th.
Walker Jamar, President, Walker Jamar Company, Duluth, Minn., June 11.
Howard Snow, President, Southern Friction Materials Company, Charlotte, N. C., June 11.
Henry Condell, Owner, Asbestos Processing Company, New York City, June 15.
John E. Zimmerman, Manager, Tulsa Branch, Kelley Asbestos Products Company, Tulsa, Oklahoma, June 15.

We extend congratulations and best wishes to all these gentlemen on the occasion of their birthdays.

THE CAREY CO. AND HERMIS TRADING COMPANY SIGN CONTRACT

Dr. Henry Reid, Vice President, Hermis Trading Company of New York City; *A. E. Binger*, Industrial Sales Manager, and *A. H. Bagenstose*, Assistant to the Merchandise Manager, Asbestos Fibre Department, The Philip Carey Mfg. Company, Cincinnati, Ohio recently signed a two year international contract for the sale of asbestos fibre and shorts.

Mr. Binger stated that Dr. Reid's firm would handle Carey asbestos fibre exports to France, Belgium, Italy, England, Holland, Germany, Austria, Spain, Finland, Turkey, Egypt, Brazil, Venezuela, and Portugal on an exclusive basis. Australia, Formosa, Japan, Sweden, Norway, Switzerland, Argentina, and Peru will be serviced on a non exclusive basis. The technical advice and assistance of Dr. Reid, coupled with Carey's technical staff and research department, will be offered to all these countries.

Hermis Trading and Carey had been working closely together on asbestos fibre sales for five years. This latest development was all part of the Carey plan to intensify the sale of asbestos fibre and shorts in the export market. Carey mines in Canada supply asbestos for the company's broad line of building materials and industrial products, as well as the requirements of other industries.

UNIVERSAL ASBESTOS MFG. COMPANY
New Type Washers

The production of washers of a new type for fixing asbestos cement roofing sheets are being marketed by The Universal Asbestos Manufacturing Company (Tolpits, Watford, Herts, England) under the brand name Uniseal.

They are made from a rubber and bitumen compound and are ⅛ inch thick. It is sated that under pressure the washers tend to close round the necks of the bolts and to ahere tightly to the sheeting, thus giving greater resistance to water penetration.

C.J. PETROW & CO. (PTY) LTD.

ASBESTOS

VOLKSKAS BUILDING 76 MARKET STREET
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ASBESTOS TEXTILES

US RUBBER

are manufactured in our own modern plant at Stark Mills, Hogansville, Ga. Spinning and weaving operations are closely controlled for maximum uniformity in asbestos yarns, fabrics and tapes. Specialties developed to meet customers' requirements.

Write: Asbeston® Dept., Textile Division

UNITED STATES RUBBER COMPANY

1230 Avenue of the Americas, New York 20, N.Y.

PABCO CHANGES NAME TO FIBREBOARD PAPER PRODUCTS CORP.

Stockholders of Pabco Products Inc. at their annual meeting in San Francisco, approved a proposal to change the name of the company to Fibreboard Paper Products Corporation. The new name is expected to be made effective as of May 1, 1956.

By this action, Pabco will adopt a corporate name closely associated with that of its wholly owned subsidiary Fibreboard Products Inc. Pabco acquired complete ownership of Fiberboard Products Inc. in January 1956. Fibreboard Products Inc. is a leading manufacturer of cartons, shipping containers, and paperboard.

In commenting upon reasons for the change in name of the parent company to Fibreboard Paper Products Corporation, Mr. Keady explained that sales of building materials, hard surface floor coverings and industrial insulations manufactured by Pabco account for about 25% of the total annual sales of more than $128 million by Pabco and Fibreboard Products Inc. together. With increasing integration of various functions of the two corporations, it was desired that the parent company adopt a name which would be more aptly descriptive of the principal activity of the combined operation.

Mr. Keady explained also that, although the name of the parent company would be changed from Pabco Products Inc. to Fibreboard Paper Products Corporation on or about May 1, 1956, the Pabco brand names and trademarks would continue to be used in connection with an aggressive program for selling the building materials, hard surface floor coverings and industrial insulations with which the Pabco name is now associated.

In other action taken at the Stockholders' Meeting, the following were re-elected as members of the Board of Directors of the parent company: *Wakefield Baker, William L. Keady, W. H. Lowe, Robert W. Miller, Joseph A. Moore, Jr., D. J. Murphy, Silas H. Palmer, Herman Phleger, Porter Sesnon,* and *Emmett G. Solomon.*

Immediately after the stockholders' meeting the Board of Directors elected the following to serve as officers of the company: *W. L. Keady,* as President; *B. P. Altick, R. E. Bundy, E. W. Fish, R. R. Galloway, A. S. Halley, J. F. Havard, O. C. Majors, M. E. Sanford, W. K. Spence* and *W. H. Young,* as Vice Presidents; *B. R. Colkett,* as Vice President and Secretary; *J. F. Thompson,* as Controller; and *V. H. Erickson,* as Treasurer.

CAPE ASBESTOS COMPANY, LTD.

In November 1955, The Cape Asbestos Company, Limited, London, acquired the old established business of the Andersons Insulation Co. Ltd., of Liverpool. *Mr. R. H. Dent,* Director, Finance and Administration of Cape, has been appointed Chairman of the Company, and *Mr. K. C. Gray* and *Mr. A. G. Grant* have joined the Board. No change in the company's policy is envisaged.

CABLE ADDRESS METABEST

METATE ASBESTOS CORPORATION

Producers of

ARIZONA CHRYSOTILE CRUDES

and

FILTERATION FIBRE

Mines & Mill:
SAN CARLOS
INDIAN RESERVATION
GILA COUNTY, ARIZONA

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Builders of

ASBESTOS CEMENT MACHINERY

Our experienced engineers and machinists offer the industry entire machines built to deliver maximum production.

Your Inquiries Are Invited

1-51 Paterson Avenue E. Rutherford, N. J.

THE PHILIP CAREY MFG. CO.
Management Appointments

In a joint announcement, Robert S. King, chairman of the board, and John W. Humphrey, president, The Philip Carey Mfg. Company released a list of management appointments. This was part of Carey's overall expansion plan to increase plant facilities, product lines, and markets.

H. Ross Barrett has been appointed executive vice president of the Philip Carey Mfg. Company. He has been with Carey since 1943 as vice president and controller and as vice president —finance.

Earl C. Faulkner has been appointed vice president in charge of the Western Division. He joined the Lehon Company as executive vice president. Lehon was purchased by Carey in February of 1955.

Clarence E. Howard was made vice president in charge of the Eastern Division and will report directly to the president. Mr. Howard has progressed through the Carey organization as salesman, assistant district manager, sales manager, district manager, division manager, and general manager to a vice presidency.

Edgar A. Boadway has become vice president in charge of the Canadian Division. He is responsible for all mining, manufacturing and sales operations for Carey in the Dominion of Canada.

Edwin F. Ziegenhardt has been appointed controller. He joined Carey in 1935 and holds a degree in accounting from the University of Cincinnati.

E. C. CRITTENDEN INTERNATIONALLY KNOWN SCIENTIST PASSES AWAY

Dr. Eugene Casson Crittenden, internationally known scientist and expert on standards of physical measurement, died on March 28th, 1956, in Washington, D. C. He was 75 years of age and had been ill for several months.

Dr. Crittenden had retired as Associate Director of the National Bureau of Standards in December 1950 but he continued to serve the Bureau as a Consultant to the Director up to the time of his illness.

Dr. Crittenden is perhaps best known for his achievements in the development and adoption of electrical and photometric standards. As Chief of the Bureau's Electrical Division for many years, he was a leading scientific figure in replacing the obsolescent international system of electrical units by the so-called absolute electrical units. These new units provide a basis for all electrical measurements now made in this country and throughout the world.

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SALL MOUNTAIN DIVISION

Nicolet Industries, Inc.

HAMILTON, OHIO

AMERICAN BRAKE SHOE COMPANY

Annual Report

Net earnings for American Brake Shoe Company during 1955 increased 50 per cent over the preceding year, from $4,304,000 to $6,441,700, according to final figures released in the company's annual report.

After payment of preferred dividends, net earnings were equal to $5.08 per share of common stock, compared with $3.19 in 1954. Net worth rose to a new peak of $72,887,027, or $47.79 per common share.

Shipments were up 34 per cent over 1954 — to $147,096,154. Both shipments and earnings were at the second highest point the company's history. New orders were the highest on record, up 74 per cent to $172,200,000.

The December 31 backlog of $42,600,000 was the highest ever achieved in a peacetime year. The backlog has continued to grow since the year's end, totalling $46,000,000 by February 1.

THERMOID ESTIMATES REVISED UPWARD

Excellent results in the final quarter of 1955 have required upward revision of estimates of Thermoid Co. sales and earnings for last year. Volume now is believed to have topped $40,500,000 up more than 20% from $33,444,936 in 1954. Demand for the company's brake linings, carpetings and other automotive accessories reflected last year's record car output while sales of industrial rubber products benefitted from improved general business conditions.

The company is understood to have gotten off to a good start in 1956 and a continuing high level of incoming business augurs well for operating results in the months ahead. New management, which took charge last August after a five-month proxy fight, embarked on an expansion program involving enlargement of both plant and warehouse facilities as well as the dealer organization. A plant to manufacture brake linings was opened in Mexico City, where the Big Three auto makers operate plants. In Brazil, a company was licensed to produce Thermoid products.

THERMOID ELECTS NEW TREASURER

The election of *Brayton H. Slade* as treasurer of Thermoid Company has recently been announced.

Mr. Slade was formerly treasurer of American Overseas Finance Corp. Earlier, Mr. Slade served in various financial capacities with White, Weld and Company, investment bankers. The Readers Digest Association, The Pullman Company and the Great Atlantic and Pacific Tea Company, among others.

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THE PHILIP CAREY MFG. COMPANY
ANNUAL STOCKHOLDERS MEETING

The annual stockholders meeting of the Philip Carey Mfg. Company was held recently, at the general offices in Lockland, Cincinnati, Ohio.

Members of the re-elected executive committee are chairman *G. A. Rentschler*, *H. E. Coombe*, *J. W. Humphrey*, *R. S. King, Sr.*, and *J. J. Rowe*. Re-elected directors include the above with *H. R. Barrett*, *L. W. Clarke*, and *C C. Merrifield*. Newly elected directors are *E. A. Boadway* and *E. C. Faulkner*. The latter fill the vacancy created by the death of C. B. Pooler and the additional directorship approved by the board. Elected officers are *R. S. King, Sr.*, Chairman of the Board; *J. W. Humphrey*, President; *H. R. Barrett*, Executive Vice President-Canadian Division; *E. C. Faulkner*, Vice President-Western Division; *C. E. Howard*, Vice President-Eastern Division; *E. J. Fasold*, Secretary and Assistant Treasurer; *S. E. Breuleaux*, Treasurer and Assistant Secretary.

METRO ASBESTOS PROCESSORS LIMITED
Appoint Sales Representative

Metro Asbestos Processors Limited of South Porcupine, Ontario, Canada, annnounce the appointment of Loma Industrial Products Limited of Toronto as their exclusive sales representative Metro states that they are ready to commence production by May and the first marketable milled asbestos fibre will be available around the beginning of June 1956. All preliminary tests were conducted in Quebec and the result of these tests was highly satisfactory. Complete milling equipment is now in place and an experienced and competent mine manager is hired. Approximately 60,000 tons of ore have been broken and are awaiting processing. The fibre has a low iron content and has been successfully used by industry.

Loma Industrial Products Limited has guaranteed the sale of the total production which will be around 30 tons daily of milled asbestos fibre of all grades. Plans for increased milling facilities are now being studied and if put into operation would enable Metro to almost double their monthly production.

UNION ASBESTOS & RUBBER CO.
First Quarter Report

Orders received by the Union Asbestos & Rubber Company for the first quarter of 1956 are up more than 41 per cent over the same period in 1955.

In the first three months of this year orders totaled $5,272,872, the largest amount of any similar period in the past four years, compared with $3,729,622 in the first quarter of 1955.

Some areas are still open for Selected Distributorship. For details write:

LYNCH ASBESTOS CO.

2939 So. Sunol Drive, Los Angeles 23, California

NATIONAL GYPSUM CO.
First Quarter Report

Sales and earnings of National Gypsum Company in the first quarter this year were the highest for any quarter in the company's history, Chairman Melvin H. Baker reported at the annual meeting.

Sales for the first three months of 1956 were $39,509,051, up 18% over $33,572,033 in the first quarter last year.

Earnings for the first quarter this year jumped 28% over the like period a year ago. They were $4,577,694 or $1.34 a share on 3,322,541 shares outstanding compared with first quarter 1955 earnings of $3,574,098 or $1.24 a share on 2,784,627 shares outstanding a year ago.

CURRENT RANGE OF PRICE

As of May 10, 1956

Arizona—	Per Ton of 2,000 lbs., f.o.b. Globe, Arizona		
No. 1 Crude (soft)	$1,500.00	to	$1,750.00
No. 2 Crude (soft)	900.00	to	1,050.00
No. 3 Crude (soft)	400.00	to	450.00
Filter Fibre (soft)	250.00	to	450.00
No. 1 Crude (semi-soft)	1,200.00	to	1,500.00
No. 2 Crude (semi-soft)	900.00		
No. 3 Crude (semi soft)	400.00		

Canada—	Per Ton 2000 lbs. f.o.b. Mine		
Group No. 1 (Crude No. 1)	$1,400.00	to	$1,725.00
Group No. 2 Crude No. 2; Crude Run-of-Mine and Sundry	750.00	to	1,100.00
Group No. 3 (Spining Fibre)	350.00	to	575.00
Group No. 4 (Shingle Fibre)	170.00	to	225.00
Group No. 5 (Paper Fibre)	110.00	to	140.00
Group No. 6 (Waste, Stucco or Plaster)			82.00
Group No. 7 (Refuse or Shorts)	38.00	to	75.00

Vermont—	Per Ton of 2000 lbs. f.o.b. Hyde Park or Morrisville, Vt.		
Group No. 3 (Spinning & Filtering)	$ 353.00	to	$ 383.00
Group No. 4 (Shingle Fibre)	172.00	to	190.00
Group No. 5 (Paper Fibre)	114.00	to	145.00
Group No. 6 (Waste, Stucco or Plaster)			82.00
Group No. 7 (Refuse or Shorts)	39.00	to	72.00

TWO (2) NEW "CHRISTY & NORRIS"
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Size: 30" — Spare parts — Wt. 4970 lbs.
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JOHNS-MANVILLE CORPORATION
First Quarter Report

Consolidated earnings of Johns-Manville Corporation and subsidiary companies for the first quarter of 1956 were $4,110,948, compared with $2,730,699 for the corresponding period last year.

Sales of $64,674,500 in the first quarter of 1956 were the highest the company has ever had in a first quarter. Sales for the first quarter of 1955 were $56,269,622.

Earnings per share of common stock for the first quarter were 64 cents after a two-for-one split of the stock effective in March. After adjustment for the split, earnings for the first quarter of 1955 were 43 cents per share of common stock.

ASBESTOS STOCK QUOTATIONS

These figures are compiled from the Commercial & Financial Chronicle. No guarantee as to their correctness.)

		APRIL 1956		
	Par	Low	High	Last
Amer. Br. Shoe (Com.)	np	40¾	44⅜	44⅜
Amer. Br. Shoe (Pfd.)	100	104	110¼	110½
Armst. Ck. (Com).	1	33⅞	37	34¼
Armst. Ck. (Pfd.)	np	94	97¾	97
Asbestos Corp. (Com).	np	41⅞	44½	43½
Carey (Com.)	10	26½	28⅝	27¾
Cassiar Asb. Corp.	np	$7.85	10¼	$8.60
Celotex (Com.)	np	40¼	47	45
Celotex (Pfd.)	20	18⅜	19½	18⅞
Certainteed (Com.)	1	27¾	30⅜	29⅝
Dominion Asb. Mines	1	20c	28c	22c
Flintkote (Com.)	np	37	40⅜	37½
Flintkote (Pfd.)	np	99	102	99
Johns-Manville (New Com.)	5	50⅝	58¾	51⅞
Natl. Gypsum (Com.)	1	57	61⅞	59
Natl. Gypsum (Pfd.)	np	101	104	101½
Pabco Products (Com.)	np	37	41¼	41¼
Pabco Products (Pfd)	100	117	127	127
Ray-Man (Com.)	np	56⅛	59¾	58⅝
Ruberoid (Com.)	1	35¼	38¾	35½
Thermoid (Com.)	1	12⅛	14½	13⅛
Thermoid (Pfd.)	50	46	51	47½
Union Asb. & Rub. (Com.)	5	6⅞	8	7⅝
United Asb. (Com.)	1	$7.55	$8.00	$7.50
U. S. Gypsum (Com.)		65	72¼	68½
U. S. Gypsum (Pfd.)	100	169	176	169
U. S. Rubber (Com.)	5	53¾	60⅞	56
U. S. Rubber (Pfd.)	100	160½	166	163½

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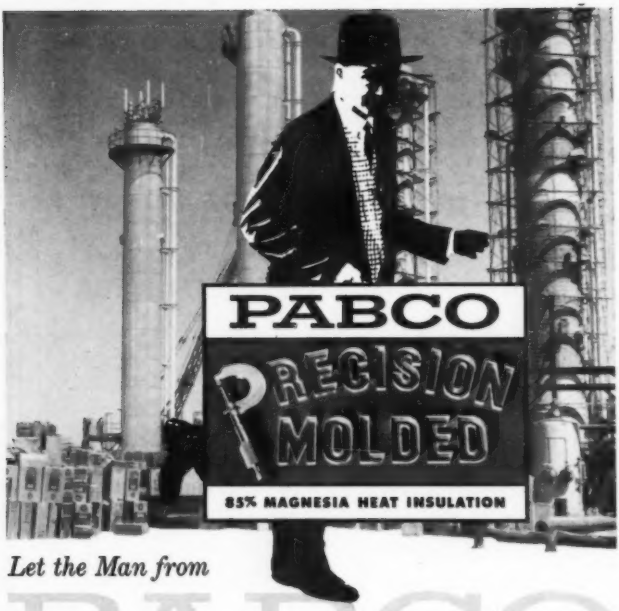

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NATIONAL GYPSUM CO.
Changes in Personnel

National Gypsum Company has selected *Holger Peterson* as manager of its new Burlington, New Jersey gypsum plant.

Mr. Peterson had been associated with the Atlantic Gypsum Company for five years when it was purchased in 1936 by National Gypsum. He was formerly assistant manager at the National Gypsum's New York City plant and subsequently was consultant on mill problems in all the company's gypsum plants.

Succeeding Mr. Peterson as manager of the Baltimore plant is *Harold E. Beard.*

Mr. Beard joined National Gypsum in 1947. He worked in the company's research department and in the production department as process engineer for gypsum before coming to Baltimore in 1953 as production superintendent.

James R. Radcliffe has joined the general commodity division. Formerly products designer at the company's research laboratory, Mr. Radcliffe will serve in a similar capacity in the sales department, where he will work closely with customers to determine preferences in product appearance .Before joining National Gypsum in 1954 he was a product designer for U. S. Plywood Corporation.

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FRANK H. SHIPE PASSES AWAY

Frank H. Shipe, pioneer in the asbestos business, passed away on March 18, 1956 at his home in Washington, D. C. Mr. Shipe was 75 years old.

In his youth Mr. Shipe showed promise as a singer, and sang in churches and music festivals. His first job was as cashier in the Hotel Raleigh. He became a paint salesman and later worked for the Philip Carey Manufacturing Company, in Richmond, Va. In 1914 Mr. Shipe went into business for himself as a distributor for the Carey Company, under the name of Asbestos Covering & Roofing Company. In 1947, the firm was incorporated and Mr. Shipe became its President until the time of his death. In 1953, the firm built a new office and warehouse to keep up with the growth of the firm's business.

Mr. Shipe leaves two sons in the business to carry on his name.

CAREY — Annual Report

Net Earnings of The Philip Carey Manufacturing Company and subsidiaries for the year ended December 31, 1955 were $2,637,239, or $3.04 per common share, compared with $2,477,253, or $3.00 per common share for 1954.

Dividends amounting to $1,361,216 were distributed during the year, $1.60 having been paid on each common share, and $375 on each share of preferred.

Consolidated net sales for 1955 were $68,020,177, compared with $54,751,170 for 1954.

Construction of the asbestos mill and mining installations at the new asbestos deposit near East Broughton, Quebec, is proceeding as planned. It is anticipated that production of asbestos will commence from this new mill early in 1957. The warehouse area of the Canadian manufacturing plant at Lennoxville, Quebec was expanded, keeping pace with increased production of building and industrial materials for the Canadian market.

ASBESTOS CHAPTER
Reprint from 1953 Minerals Yearbook

The 1953 Chapter on Asbestos from the U. S. Minerals Yearbook, published annually by the U. S. Bureau of Mines, has just arrived. All "ASBESTOS" readers who have collected an Asbestos Library, will want a copy. Send 10c (in coin) to the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

It contains salient statistics of the Asbestos Industry in the United States, including a table of World production of Asbestos, (by countries) 1949 to 1953 inclusive.

Other information on the Asbestos Industry in 1953 which the pamphlet contains will no doubt be of interest to our readers.

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The processes of converting crude Asbestos into a wide range of products are carried out entirely in our factory at Cleckheaton. Long experience in a highly specialised industry is supported by a well-equipped modern laboratory devoted to intensive research and experimental work. B.B.A. Products include Asbestos Fibre, Yarns, Tapes, Cloths, Packings, Rovings, Tubing, Webbing, Clothing, Jointing, Mintex Brake and Clutch Liners and other Friction Materials, all types of belting for industry including Scandura the original P.V.C. fireproof conveyor belting.
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NATIONAL GYPSUM CO.

Lewis R. Sanderson Retires

National Gypsum Company has announced the retirement of *Lewis R. Sanderson* as president of the company effective April 30. The board of directors elected Executive Vice President *Fred A. Manske* to succeed Mr. Sanderson.

Operations Vice President *Wells F. Anderson* has been elected a director filling the vacancy created by Mr. Sanderson's retirement. Mr. Anderson also was elevated to the rank of senior vice president.

The creation of a new National Gypsum policy board composed of the president and the two senior vice presidents, Mr. Anderson and *John W. Brown*, vice president in charge of marketing, also was revealed.

DRYCOR FELT COMPANY

Appoints Vice President

The Drycor Felt Company recently announced that *Bert I. Bertelsen* has been appointed Vice President in charge of Manufacturing at their Staffordville and Rockville, Connecticut plants.

Mr. Bertelsen came to Drycor Felt Company in 1952 as Director of Research. Prior to this, he had been associated with the Company for several years as consultant.

From 1939 to 1952, Mr. Bertelsen was with the Botany Mills in Passaic, N. J., in charge of their Physical Lab. He is a member of Textile Research Institute, American Association for Textile Technology, the Textile Institute of Great Britain, and also served as a Governor for the AATT and was a member of the Advisory Committee on the Wool Project of Textile Research Institute.

I. C. CAMPBELL, SECRETARY

Asbestos Corporation Limited

It has recently been announced that *I. C. Campbell* has been appointed Secretary of Asbestos Corporation Limited.

Mr. Campbell replaces *J. A. Marcotte* who relinquished this office upon becoming a director of the company.

KEASBEY & MATTISON CO. ELECTS

New Director & Executive Vice President

Keasbey & Mattison Company recently announced the election of *Robert R. Porter* to the Board of Directors and also his appointment as Executive Vice President of the Company.

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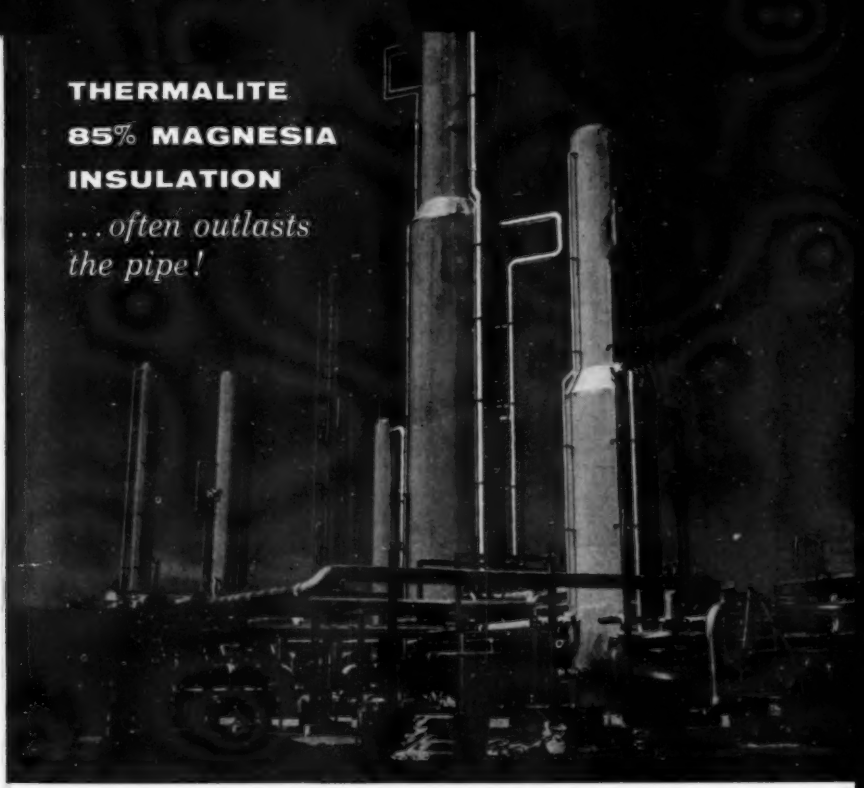

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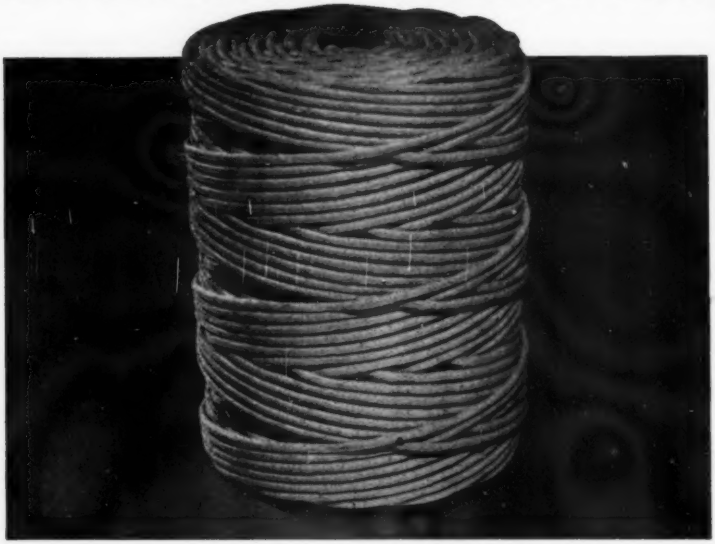

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